

Session Program

24-30 Aug 2025

**The XIX International Conference on Topics in
Astroparticle and Underground Physics
(TAUP2025)**

Underground Laboratories

Xichang Qionghai Hotel
Xichang, Sichuan, China

Monday 25 August

14:00

Underground Laboratories: parallel session 1

Session | **Location:** North Hall #3 | **Convener:** Sean Paling

14:00-14:20 **The status and prospect of CJPL**

Speaker

Zhi Zeng

14:20-14:40 **Status of the Yemilab operation**

Speaker

Jungho So

14:40-15:00

The Piedicastello Tunnels: a Potential Underground Laboratory for Astroparticle Physics in Trento, Italy

Speaker

Francesco Nozzoli

15:00-15:20

Element synthesis in star by deep underground nuclear astrophysics JUNA experiments

Speaker

Weiping Liu

15:20-15:40

A new HPGe spectrometer with $\mu\text{Bq/kg}$ sensitivity for sample analysis

Speaker

Alex Biondi

15:45

16:00

Underground Laboratories: parallel session 2

Session | **Location:** North Hall #3 | **Convener:** Pia Loaiza

16:00-16:20

In-situ environmental radiation background measurement in the second phase of CJPL

Speaker

Peng Zhang

16:20-16:40

Measurement of the Cosmic Muon Flux at the Stawell Underground Physics Laboratory using the muon veto of the SABRE South Experiment

Speaker

Mr Guangyong Fu

16:40-17:00

Cosmic Moun flux measurement using the 1-ton prototype detector of water phase in the CJPL-I

Speaker

yapeng wang

17:00-17:20

Cosmogenic Radiation Characterization for the Colorado Underground Research Institute**Speaker**

Dakota Kehlbeck

17:20-17:40

An LNGS Mobile Neutron Detector (ALMOND): Mapping Ambient Neutron Background of Gran Sasso National Laboratory**Speaker**

Melih Solmaz

17:40-18:00

The HENSA project for the characterization of neutron fluxes in underground laboratories**Speaker**

Nil Mont

18:00-18:20

Radon-222 Screening Capability at SNOLAB**Speaker**

Nasim Fatemighomi

18:20

Tuesday 26 August

14:00

Underground Laboratories: parallel session 3

Session | Location: North Hall #3 | Convener: Yeongduk Kim

14:00-14:20

Th and U assessment in high-purity copper for low-background applications at CUP

Speaker

Olga Gileva

14:20-14:40

Cross-validated ICP-MS Methodology for Ultratrace $^{232}\text{Th}/^{238}\text{U}$ Determination in Material Radiopurity Assessment

Speaker

Yan Zhu

14:40-15:00

Application of the bateman equation to analyze disequilibrium in the ^{232}Th and ^{238}U chains in low-background detector materials

Speaker

Eunkyung Lee

15:00-15:20

Simulation of the background from $^{13}\text{C}(\alpha, n)^{16}\text{O}$ reaction in the JUNO scintillator

Speaker

Maxim Gromov

15:20-15:40

K-42 mitigation studies in Ar-42-spiked liquid argon for LEGEND

Speaker

Christoph Vogl

15:40

16:00

Underground Laboratories: parallel session 4

Session | Location: North Hall #3 | Convener: Xiaolian Wang

16:00-16:20

Readout Electronics on Waveform Digitization and High-precision Time Measurement

Speaker

Jiajun Qin

16:20-16:40

Development of cryogenic ASICs for HPGe detectors for dark matter and neutrino experiments

Speaker

Canwen Liu

16:40-17:00

Energy and timing resolution boost with waveform analysis

Speaker

Yuyi Wang

17:00-17:20

Development of an R-value-Based Trigger Algorithm for Energy Threshold Reduction**Speaker**

Woo Tae Kim

17:20-17:40

First attempt of reconstruction for multi-point events based on Markov chain Monte Carlo method in liquid scintillator detectors**Speaker**

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17:40-18:00

High-speed and high-precision pulse digitization electronics system with high-bandwidth readout for frontier physics experiments**Speaker**

Haoyan Yang

18:20

Wednesday 27 August

14:00

Underground Laboratories: parallel session 5

Session | **Location:** North Hall #3 | **Convener:** Long Ma

14:00-14:20 **Validation of LMO crystals for the CUPID Experiment**

Speaker

Massimo Girola

14:20-14:40

High Spectral Resolution Perovskite Semiconductor CsPbBr₃ for Gamma-ray Detection

Speaker

Yihui He

14:40-15:00

The Study of Tungsten Thin Films for Ultra-low Tc Superconducting Transition Edge Sensors for 0νββ Experiment

Speaker

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15:00-15:20

Fast optical photon-number-resolving detector with iridium transition edge sensor

Speaker

Dr Yuki Mitsuya

15:20-15:40

Superconducting Qubits as Particle Detectors

Speaker

Alberto Ressa

15:40

16:00

Underground Laboratories: parallel session 6

Session | **Location:** North Hall #3 | **Convener:** Shukui Liu

16:00-16:20 **First Results from the CRAB Experiment at the TRIGA Mark-II Reactor**

Speaker

Elisabetta Bossio

16:20-16:40

Development of nuclear power plant reactor monitoring by the neutrino method using the iDREAM detector

Speaker

Dr Alexander Chepurinov

16:40-17:00

Nuclear Recoil Tracking for Directional CEvNS Measurements

Speaker

David Caratelli

17:00-17:20

Development and test of a prototype time projection chamber for RELICS neutrino experiment**Speaker**

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17:20-17:40

The measurement of the wavelength-dependent water transparency in Super-Kamiokande**Speaker**

Tomoaki Tada

17:40-18:00

New 1-ton neutrino detector at CJPL-I: equipment upgrades and performance**Speaker**

Haozhe Sun

18:00-18:20

Modelling of HPGe Detectors for the LEGEND Experiment and Low-Background Research**Speaker**

Difei Xu

18:20

Thursday 28 August

14:00

Underground Laboratories: parallel session 7

Session | **Location:** North Hall #3 | **Convener:** Prof. Yulan Li

14:00-14:20

Research progress on new silicon drift detector for X-ray detection

Speaker

Prof. Rui Jia

14:20-14:40

R&D of the microchannel plate photomultiplier tubes

Speaker

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14:40-15:00

Prototype Testing for TRIDENT: In-Situ Performance of Multi-PMT Optical Modules

Speaker

Fuyudi Zhang

15:00-15:20

Development of Ge detectors at THU for rare event detection

Speaker

Yang Tian

15:20-15:40

Progress of Domestic High-Purity Germanium Crystals growth and detector fabrication

Speaker

Wei Zhang

15:40

16:00

Underground Laboratories: parallel session 8

Session | **Location:** North Hall #3 | **Convener:** Hide-Kazu TANAKA

16:00-16:20

Current status and technical aspects of GRANDProto300

Speaker

Sei Kato

16:20-16:40

Design Plan and Development Progress of the LACT SiPM Camera

Speaker

Mingjie Yang

16:40-17:00

Progress on the NvDEx high pressure vessel and gas system

Speaker

Qiang Hu

17:00-17:20

Characterization of the JUNO Liquid Scintillator with Proton and Carbon Beams

Speaker

Ulrike Fahrenholz

17:20-17:40

Magnetic dipole-dipole transition for scintillation quenching

Speaker
Zhe Wang

17:40-18:00

Omnidirectional Photon Time Projection with Large Liquid Neutrino Detectors

Speaker
Benda Xu

18:00